

Notice of Allowability

Application No.

10/550,947

Examiner

Brian M. Healy

Applicant(s)

ITO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 09/21/2006.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>20050928</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


BRIAN HEALY
PRIMARY PATENT EXAMINER

DETAILED ACTION***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: There are two closest references of record, i.e. the first is Ohmuro et. al. (Fujitsu Limited) European Patent Application No. EP 0793133A2 teaches a liquid crystal device (Fig.1) that includes a liquid crystal layer 12 where retardation is optimized between 80nm and 400nm and sandwiched between polarizing layers 13A,13B. The second reference is Kelly et. al., U.S.P. No. 6,839,103 a liquid crystal display (Figs.1-2) comprising: a plurality of layers 1,6,A,7 that includes at least one polarizer, a liquid crystal layer that uses rod-like liquid crystal molecules, a first and second anisotropic optical layers having positive and negative index anisotropy with the retardation values listed in claim 1.

Neither Ohmuro et. al. or Kelly et. al. teach or suggest (either singly or in combination) the claimed liquid crystal display device comprising: two polarizer films having absorption axes being crossed normal to each other, a liquid crystal cell disposed between these two polarizer films comprising a pair of substrate and liquid crystal layer composed of liquid crystalline molecules held therebetween where the liquid crystal molecules are orientated substantially normal to the substrates under non-operative state in the absence of an applied external electric field, at least one layer of a first optically anisotropic layer having an optically positive refractive anisotropy being formed of rod-like liquid crystal molecules with the specific values or ranges and equations for R_e , R_{th} listed in claims 1,14 and 16 (See the independent claims for the

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specific values). The dependent claims 2-13,,15 and 17-27 are inclusive of the limitations of the independent claims as well as other additional limitations. (See the dependent claims for the specifics of these additional limitations)..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

A copy of PTO-1449 will be included in the office action.

The following references are also cited by the Examiner as being pertinent and/or related art: Matsufuji, U.S, Patent Application Publication No. U.S. 2006/0221275A1 (Figs.1-2), Broer et. al., U.S. Patent Application Publication No. U.S. 2003/0038912A1 (Figs.1-12) and Kelly et. al., U.S. Patent Application Publication No. U.S. 2003/0164920A1 (Figs.1-2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed schedule Mon-Fri. 6AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian M. Healy
Primary Examiner
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A handwritten signature in black ink, appearing to read "B. M. Healy", written in a cursive style.

BRIAN HEALY
PRIMARY PATENT EXAMINER